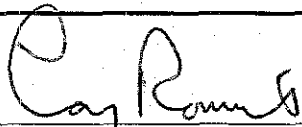


Meeting Minutes Transmittal/Approval
Unit Managers' Meeting
200 Area Groundwater and Source Operable Units
1200 Jadwin Avenue, Richland, Washington
July 19, 2006

APPROVAL:

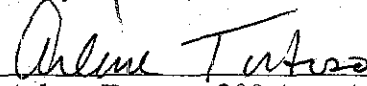


Date:

8-16-06

Larry Romine, 200 Area Unit Manager, DOE/RL

APPROVAL:



Date:

8/22/06

Arlene Tortoso, 200 Area Assistant Manager, DOE/RL

APPROVAL:

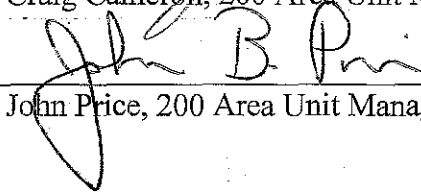


Date:

8/10/06

Craig Cameron, 200 Area Unit Manager, EPA

APPROVAL:



Date:

8/16/06

John Price, 200 Area Unit Manager, Ecology

RECEIVED

AUG 30 2006

EDMC

Minutes of the 200 Area Unit Managers' Meeting of July 19, 2006 are attached. Minutes are comprised of the following:

| | |
|--------------|---|
| Attachment 1 | Agenda |
| Attachment 2 | Attendance Record |
| Attachment 3 | Groundwater Operable Units Status |
| Attachment 4 | Groundwater Operable Units Status Figures |
| Attachment 5 | Attachment 3, 200-BP-5 Operable Unit Groundwater Well List |
| Attachment 6 | Source Operable Units and Facilities Status |
| Attachment 7 | Agreements and Issues List |
| Attachment 8 | Action Item List |

200 AREA UNIT MANAGERS' MEETING DRAFT AGENDA

1200 Jadwin/Rm 1-C1
July 19, 2006

GROUNDWATER OPERABLE UNITS STATUS (8:30-9:15)

SOURCE OPERABLE UNITS AND FACILITIES STATUS (9:15-9:45)

ISSUE RESOLUTION MEETING (10:00-11:30)

- (See Issues List)

General

- Outstanding Action Items
- Open for Regulatory Topics or Action Items
 - TPA Change Package Approvals

200 Area Unit Managers Status Meeting
July 19, 2006

Please print clearly and use black ink

| PRINTED NAME | ORGANIZATION | O.U. ROLE | TELEPHONE |
|---------------------|--------------|-------------------------|-------------------|
| Shirley Simon | OREGON | | (541) 963-0853 |
| Janice Williams | FH | | 372 3553 |
| Greg Thomas | FH | | 373-3907 |
| Jenne Shuts | Ecology | | 372-7956 |
| Sanya Moore | FH-TMA | | 372-3320 |
| Bob Bryce | PNNL | | 373 3586 |
| Arlene Tufano | DOE | GW 200 W-Mon | 373-9631 |
| Stuart Luttrell | PNNL | GW Mon | 376-6023 |
| Bob Gilpin | FH | | 373-3285 |
| Stan Sobczyk | NPT | | 843-7375 |
| Mary Todd Robertson | FH | 200 Area Waste Sites | 373-3920 |
| Rod Lobos | EPA | | |
| Virginia Rohay | FH | | 373-3803 |
| Rick Bond | Ecology | | 372-7885 |
| Ann Shattuck | FH | PW-1, MW-1 | 376-8756 |
| Jane Borghen | Fit | GW | 373 3804 |
| Tom Post | EPA | 200 Tanks | 376-6623 |
| Craig Cameron | EPA | | 376-8665 |
| Jeann Wenne | ECO | | 372-7930 |
| Dennis Felt | COA | | |

Zelma Jackson Ecology

372-7910

200-UP-1, 200-ZP-1, AND 200-ZP-2 GROUNDWATER OPERABLE UNITS

July 19, 2006

GROUNDWATER OPERABLE UNITS STATUS

200-UP-1 OU

- Rebound Study:
 - Tc-99 and uranium concentrations are still below the interim RAOs of 900 pCi/L and 48 ug/L respectively (**Attachment 1 and 2**).
 - DOE-RL received Ecology's concurrence on July 19 to issue the rebound study letter report presented to Ecology several months ago.
 - DOE-RL will meet with Ecology the third week in August to discuss how the 200-ZP-1 RI Report used MTCA guidance for evaluating historical data.
- RI/FS Work Plan:
 - Six of 12 new 200-UP-1 wells (UP1, UP2, UP3, UP4, UP5, and UP11) have been installed. The remaining six new 200-UP-1 wells are currently scheduled to be installed in FY2007.

200-ZP-1 OU

- Remediation Treatment Status:
 - Between May 29, 2006 and July 2, 2006 the 200-ZP-1 pump-and-treat system average pumping rate was approximately 175 gpm.
 - During this period we had multiple short term leak detection problems that shut the system down for a short period.
 - Currently 8 of the 9 extraction wells are online. Extraction well #4 is offline due to leak detection.
 - **Attachment 3** shows the most recent Tc-99 concentrations in extraction wells 299-W15-765 and 299-W15-40. The average Tc-99 concentration of the mixed extraction water entering the ZP-1 treatment building is still well below the MCL of 900 pCi/L.
 - Treatability Test Plan for Tc-99 removal from groundwater will be issued for review in draft in the next few weeks. EPA requested the test plan be releasable to stakeholders.
 - Treatability test for Tc-99 removal will be performed in FY2007. The implementation schedule will be contained in the Treatability Test Plan.
- DNAPL Investigation Status:
 - The hookup of well 299-W15-6 to the 200-ZP-1 treatment system is expected to be completed by the first week of August 2006.
 - Vista is performing vertical sampling (using hydraulic hammer rig) by Z-9 at

this time.

- Vista will be performing additional soil gas sampling in the vicinity of the TX tank farm in early August.
 - Vista Engineering is currently preparing the DNAPL source term report to be issued to DOE-RL sometime around August 2006.
- New Well Status:
 - New ZP-1 well DD (299-W11-86) (**Attachment 4**) is near total depth and will be completed as a monitoring well near the base of the aquifer. This well was drilled adjacent to existing well 299-W11-10 (screening upper portion of the aquifer). Water level measurements between these two wells will provide information on vertical gradient.
 - RI/FS Status:
 - DOE-RL has given FH authorization to continue using CFEST code to support ZP-1 risk calculations.
 - The detailed screening of technologies has started.
 - A data management plan has been prepared to ensure the database used to support risk calculations is controlled carefully to ensure the reproducibility of calculations.
 - We are working towards delivering the Draft A FS/PP to EPA by September 30, 2007 as EPA has offered to extend the M-15-48B milestone out to bring it in line with the PW-1 FS schedule.
 - EPA re-iterated that they concur that September 30, 2007 should be the date we are working towards for the M-15-48B milestone.
 - Tc-99 Investigation Status:
 - The draft DQO summary report is being prepared for stakeholder review.
 - The Sampling and Analysis Plan for drilling two new wells in FY06 is currently being prepared.
 - The Sampling and Analysis Plan for the other characterization activities developed through the DQO process is also being prepared.

200-PW-1 (200-ZP-2) OU

- Soil Vapor Extraction System (SVE):
 - The active SVE system started up April 3, 2006 as scheduled.
 - Between June 5 and July 9, 2006, the system average extraction rate was 299 cfm.
 - The SVE system is in the process of being relocated to Z-9.
 - FH will be working closely with Vista Engineering in October to help them test the effectiveness of steam injection on enhancing the recovery of CCl₄.

- Well 299-W15-48 (Z-9 slant well) is being completed as a vapor extraction well.
 - EPA noted that we should be planning to purchase a new larger SVE unit in FY2007.
 - EPA requested that we hook up the Z-9 slant well to the SVE system when it is ready. It should preferably be hooked up by itself and should be run for several weeks.
- The passive system remains operational.
- Monthly monitoring for June 2006 was not available for presentation at this meeting and will be presented at the next UMM meeting.

200-PO-1 GROUNDWATER OPERABLE UNIT

July 19, 2006

GROUNDWATER OPERABLE UNIT STATUS

200-PO-1 OU

- Regulatory Path Forward: (no change)
 - A tentative path forward is currently being negotiated as part of M-015-00 milestone discussions.
 - A concern was raised by Ecology regarding the need to synchronize the 200-PO-1 RI/FS documentation schedule with the 200-PW-2, 200-PW-4 closure plan schedule.
- SAP: (no change)
 - DOE-RL is currently implementing the approved 200-PO-1 SAP.
- DQO:
 - The DQO process continued for a 200-PO-1 Investigation Plan/Feasibility Study effort.
- Wells:
 - Integrating with Waste Sites on planned 216-A-4 characterization well. Plan to complete proposed well as a groundwater monitoring well.
 - Integrating with ORP on planned wells at WTP.
 - Three entry wells and one corehole are planned. FH will be conducting detailed groundwater sampling in one well, C4997.
- Science & Technology
 - An SOW has been prepared for High Resolution Reflection Seismic Pilot Study in 200 East Area. Information on the pilot study has been shared with DOE and the regulators.
 - Plans are being made to test an in-situ tritium sensor in the 299-E17-18 well adjacent to 216-A-36B Crib south of PUREX.

200-BP-5 GROUNDWATER OPERABLE UNIT

July 19, 2006

GROUNDWATER OPERABLE UNIT STATUS

DQO Report

- The draft DQO report is approximately 98% complete
- The DQO was sent to the stakeholders for review May 9th
- EPA comments were received and discussed July 12th
- The final copy is due to be released in beginning of September.
- One additional well was identified in Work Plan development to determine the feasibility of pump and treat for the Tc-99 plume north of the 200-East Area.

Technology Screening: The Draft Final report has been cleared at PNNL and a meeting is scheduled for next week regarding comments. This report identified six technologies for further evaluation during the RI/FS process. The technologies included:

- Monitored Natural Attenuation
- Pump and Treat
- Injectable Apatite Solution
- Stabilization by polyphosphate
- Anaerobic Bioremediation
- In Situ Redox Manipulation.

Work Plan: Work plan is in progress. The decisional draft is scheduled to be completed by the end of October. Work is currently focused on detailing sampling and analyses for the proposed wells from the DQO.

Geophysical Well Surveys: Wells 299-E33-18, 299-E33-41 and 299-E33-44 are scheduled for geophysical surveying by Stoller.

Drilling SAP: The draft drilling SAP for three of the groundwater wells this year is in review with EPA currently. The drilling SAP will include the following scope:

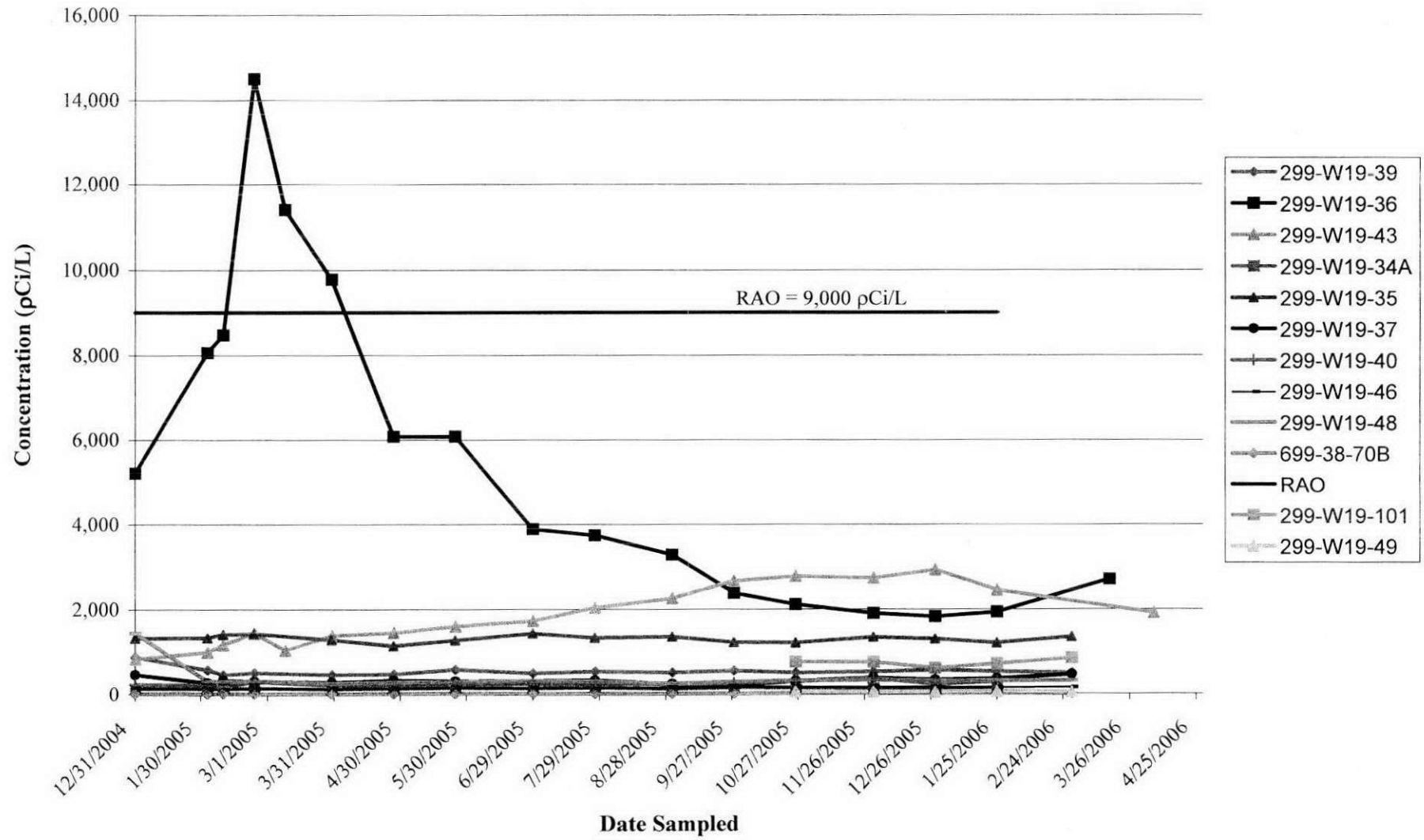
- Drill 3 new remedial investigation wells.
 - 1) A well to define the width of the uranium plume to the north of well 299-E33-26 and south of well 699-49-55.
 - 2) A well to define the concentration of technetium between well 699-49-57A and well 699-52-57.
 - 3) A well to define contamination in the Rattlesnake Ridge confined aquifer upgradient of well 299-E33-12.

Waste Control Plan: The Tri-Parties agreed to the revised **Attachment 3** to the "Waste Control Plan for the 200-BP-5 Operable Unit," DOE/RL-2003-30, which reflects the addition of 3 new wells addressed in the new 200-BP-5 Drilling SAP. The new wells are highlighted in the update to Attachment 3 (**Attachment 5**).

Comments from EPA

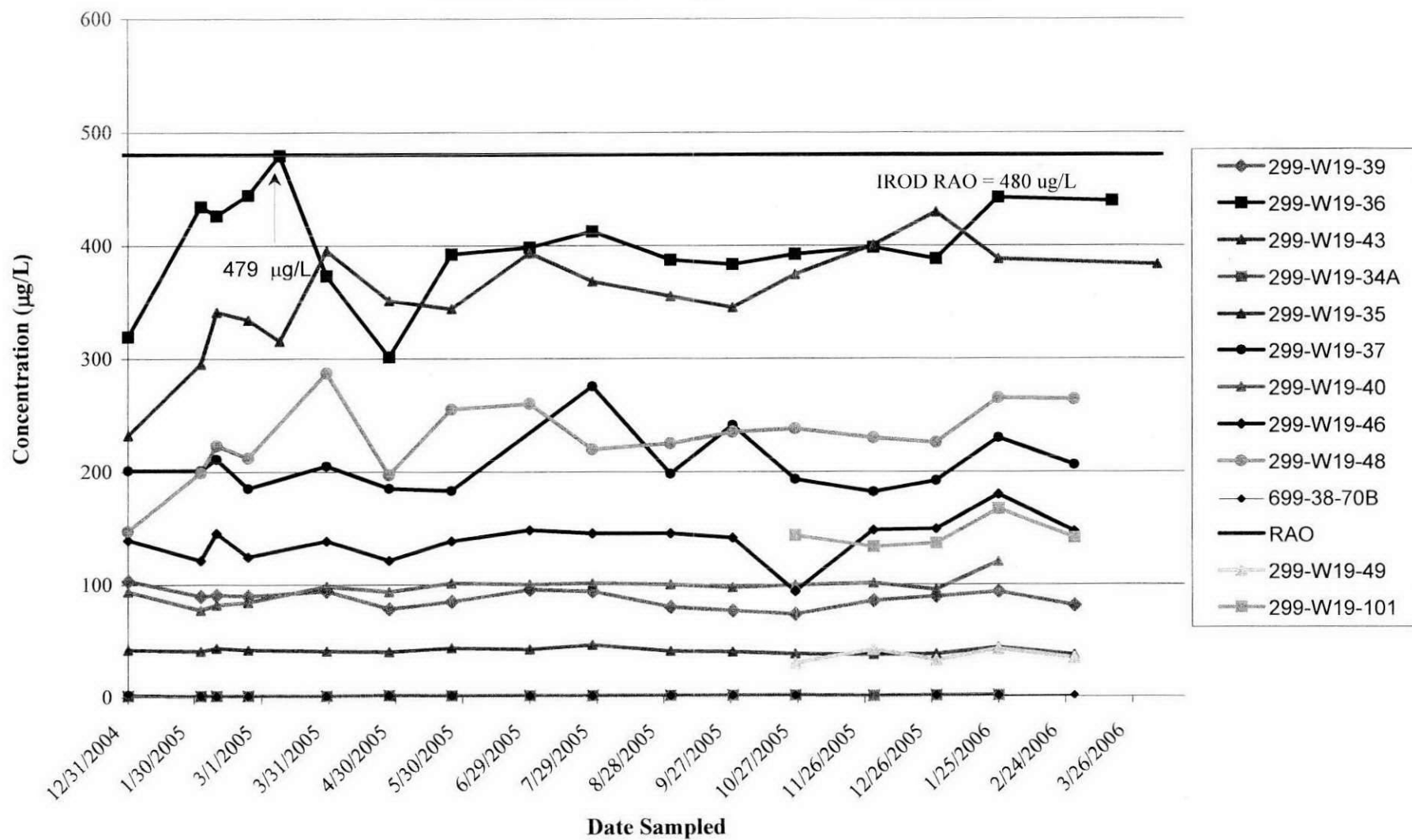
Interim Action Decision: DOE is required to decide on interim actions for the uranium plume using existing wells near the 299-E33-9 well.

200-UP-1 Rebound Study, Technetium-99 (pCi/L)



Attachment 1

200-UP-1 Rebound Study, Uranium Concentrations

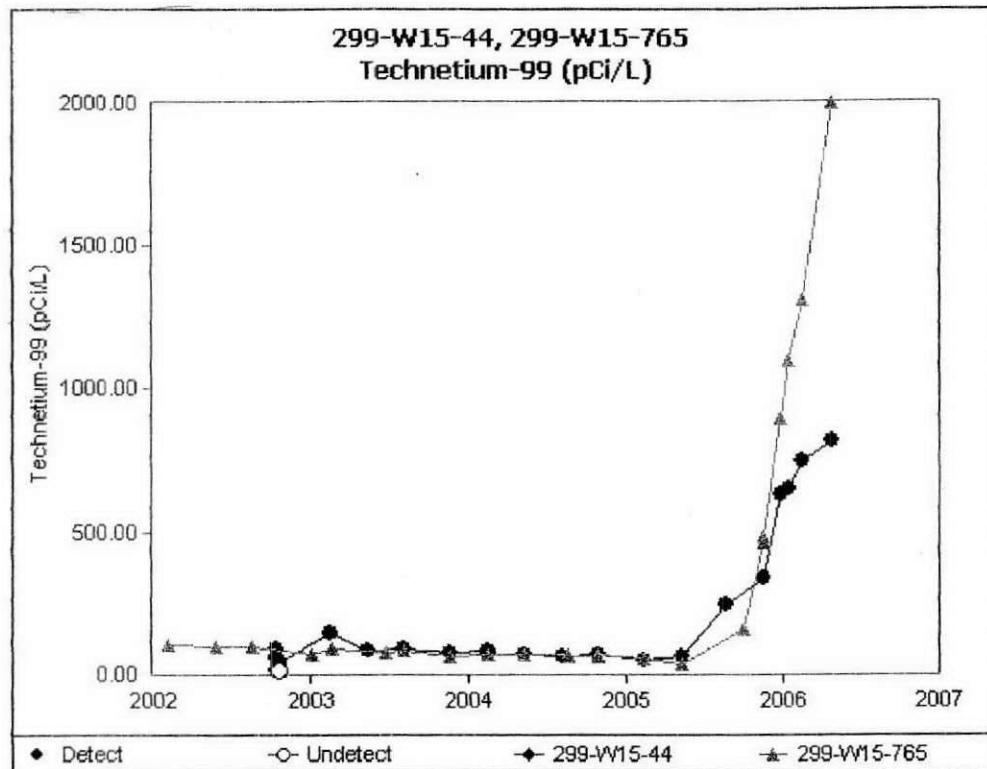


Attachment 2

Attachment 4, Figure 2

Attachment 3

Attachment 4, Figure 3



Attachment 5

Attachment 3 200-BP-5 Operable Unit Groundwater Well List

(from Revised Monitoring Network – SAP)

- Shading indicates wells added for this change.

216-B-5 Reverse Well and B-Plant

299-E28-23
299-E28-24
299-E28-25
299-E28-5
299-E28-6
299-E28-2
299-E28-17
299-E28-27
299-E28-8

216-BY Cribs (cont.)

699-49-55A
699-53-55C
699-55-60A
699-49-57A
699-49-57B
699-50-53A
699-55-57
699-53-55A
699-53-55B
699-65-50
699-47-60
699-57-59
699-59-58
699-60-60
699-61-66
699-64-62
699-72-73
699-61-62
699-66-58
699-66-64
699-70-68
699-65-72
699-73-61
699-50-59
699-48-50B
699-50-56

WMA C

299-E27-14
299-E27-15
299-E27-7

216-B-3 Pond

699-43-40
699-45-42

Gable Mountain Pond

699-53-47A
699-53-47B
699-53-48A
699-53-48B
699-54-45A
699-54-45B
699-54-48
699-54-49
699-55-50C

216-BY Cribs and WMA B-BX-BY

299-E28-26
299-E33-46
299-E33-7
299-E33-38
299-E33-26
299-E32-10
299-E33-13
299-E33-34
299-E33-16
299-E32-9
299-E33-35
299-E33-12
299-E33-41
299-E33-338
299-E32-4
299-E33-39
299-E32-6
299-E33-15
299-E33-28
299-E33-30
299-E33-18
299-E33-42
299-E33-43
299-E33-44
299-E33-50

216-B-62 Crib

299-E28-18
299-E28-21

200 AREA UNIT MANAGERS' MEETING SOURCE OPERABLE UNITS AND FACILITIES STATUS

July 19, 2006

SOURCE OPERABLE UNITS STATUS

M-15 TPA Milestones

- Technical discussions resumed the week of July 17, 2006.

200-PW-1, 200-PW-3, & 200-PW-6

- The Z-9 slant borehole has been completed as a vapor extraction well. Decommissioning of the site has been completed.
- The field summary report for the A-8 borehole has been finalized and distributed.
- Efforts continued on preparation of the RI Report, which is due 11/30/06 (M-015-45A).
- Vista Engineering has initiated vadose zone sampling in the Z-9 area using the Hydraulic Hammer Rig for subsurface access. Two of the nine planned locations at Z-9 have been completed. Vista will also sample 8 locations at Z-1A.
- The vadose zone data currently being collected at Z-9 and Z-1A by Vista Engineering using the Hydraulic Hammer Rig will not be available for inclusion in Draft A of the 200-PW-1 Remedial Investigation Report. Draft A will include text that will serve as a placeholder for this data indicating that the data will be included in the Feasibility Study.
- Vista Engineering drilled a well 190 ft deep at the headend of Z-1A to support the test. The well was geophysically logged on 6/29, and will be completed as an SVE well.
- Vista Engineering is planning to conduct the steam injection test at the Z-1A site in October.
- Vista Engineering held Project Technical Workshop #5 on the carbon tetrachloride investigation on 6/27-6/28.
- Vista Engineering is continuing to collect data from the two instrument trees installed in the air space of the 216-Z-9 trench in May 2006.
- EPA liked the statements in the ZP-1 RI report that clearly articulate what we know and what we don't know and whether there is sufficient data to move forward with the risk assessment in the FS. EPA recommended that the PW-1 RI report contain the same kind of assessment.

200-TW-1, 200-TW-2 & 200-PW-5 (no change)

200-CW-1 & 200-CW-3

- EPA's expectation is that 200-CW-3 waste sites would be remediated to meet M-16-00A milestone.

200-PW-2 & 200-PW-4

- Ecology requested additional copies of FS to support their review.

- Status/path forward on RI Report.

200-CS-1

- Comments received July 3, 2006
- Ecology has stated the FS does not fulfill the intent of the Tri-Party Agreement. (NOTE, this was modified by a July 31 letter from Ecology, stating that their intent was not to disapprove the FS).
- DOE has issued a dispute letter. (NOTE, there is no basis for a dispute, subsequent to Ecology's letter of July 31).
- RL and Ecology project managers are assessing the path forward.

200-CW-5, CW-2, CW-4, & SC-1 (no change)

- Researching discrepancies between the September 1974 Battelle document and the RI data at U-Pond.

Ecological Risk Assessment

- RL is considering changes to the Phase III SAP in response to EPA's position regarding installation of artificial animal burrows for vapor sampling and for addition of two offsite reference sites for soil sampling.
- EPA stated that the VOC sampling of the artificial animal burrows must be done in time to support 200-PW-1/3/6 FS.

200-IS-1 & 200-ST-1

- Review of steps 6 and 7 occurred June 26 and 27 incorporating comments.
- Finalizing document for decision maker review and approval.

200-LW-1/200-LW-2

- Ecology formally transmitted comments on the RI Report June 21, 2006. Development of responses is in progress. An extension request is being prepared.
- Efforts continued on preparation of FS.

200-MW-1

- Sampling and Analysis plan will be submitted in August.
- Initiated efforts on FS.

200-UR-1

- Preparing Rev. 1 of Sampling and Analysis plan for approval.

- Initiated non-intrusive radiological surveys.

200-SW-1/2

- A DQO summary report and the Sampling and Analysis Instruction report for nonintrusive characterization in the 200-SW-2 waste sites were completed (including FH approvals and concurrences from DOE-RL and Ecology). Characterization scope includes geophysical investigations, passive organic vapor sampling, and radiation surveys. Mobile Surface Contamination Monitor (MSCM) radiation surveys have been performed on 218-E-2A and 218-E-8.
- Geophysical data collection was initiated on 6/2/2006. Data was collected at eight burial grounds: 218-E-1, 218-E-2A, 218-E-8, 218-E-12A, 218-W-1, 218-W-2, 218-W-3 and 218-W-11. Data have been evaluated and a draft report was provided to FH for review on 07/13/06.
- Passive sampling for organic vapors was initiated on 6/12/2006 and completed on 07/05/06. Laboratory results were received on 7/18/2006. The scope involves over 130 locations in five burial grounds: 218-W-3A, 218-W-3AE, 218-W-4B, 218-W-4C and 218-W-5.

BC Cribs and Trenches

- Focus is on consideration of a Treatability Test that would provide information to address potential worker dose uncertainty, the contaminant distribution model(s), refinement of the excavation process, collection of remedial design information, and potential verification of the inventory model. Cost and schedule development is in progress.

200-UW-1

- Field work per the Time Critical Removal Action (TCRA) RAWP continues. 200-W-42 pipeline from the south end of 216-U-8 to 216-U-12 crib has been removed. SAP will be revised to incorporate all Change Notices and reflect discrete samples for the stockpiles. Backfill Concurrence will be updated and resubmitted with justification of issues.
- 200-W-42 pipeline excavation north of 216-U-8 is done and sample results are being QC validated.
- In accordance with the updated TCRA, excavation of the remainder of 200-W-42 pipeline has begun. As of 7/11/06, removed ~ 77% (i.e., 541') of VCP between 16th Street and U-8. Transferred 662 ERDF cans of waste (299 planned and 363 due to lateral spread of contaminants). We are excavating to 15' (+1,-0) (where necessary) and evaluating options for high field measured contamination levels >15'.
- Final Draft ROD and responsiveness summaries have been updated to respond to latest EPA comments. Workshops scheduled for 6/12/06 were postponed pending resolution of adequate deep vadose characterization data, USGS comments and potential impact on GW due to uranium in 216-U-12 Crib. EPA provided updated list of USGS issue.

- Responsiveness summaries for TPA Change Request for reclassifying Crib 216-U-12 to a RCRA Past Practice (RPP) unit were reviewed on 6/13/06. Ecology to provide input on approval of this change as it relates to the issuance of the UW-1 ROD. Change is proposed to be approved before ROD is approved.
- TPA Change Request to change 216-U-15 from a CPP to a RPP has been reviewed and updated. Package will be transmitted with U-12 package for final review. No public review is anticipated for this portion of the change request.
- PRGs / RAGs for 200-UW-1 need to be finalized. Modeling is near completion to determine goals based on 1000 and 10000 year MCLs. Once completed, results will be presented to RL, EPA and Ecology to determine acceptable PRGs / RAGs. **Due to finding contamination below 15' at 200-W-42 excavation and possible need for this information in the ROD, establishing acceptable goals needs to be given a high priority.**
- Area C cultural review was sent for public review starting 7/3/06. Challenges are being made to development of site due to view impact from Rattlesnake Mountain.

FACILITIES STATUS

- **U Plant Canyon Disposition Initiative (CDI)**

Continued development of Remedial Design Engineering Alternatives Studies

- Canyon reactivation study (crane, HVAC, and electrical/lighting) (July)
- Equipment size reduction/cell space optimization study (July)
- Canyon demolition study (July)

Continued development of Remedial Design and Remedial Action Work Plan (RD/RA Workplan)

- **Facility Binning**

Draft A of the Central Plateau Facility Binning Report was transmitted by RL to EPA and Ecology on June 29. The three agencies are scheduled to meet on July 27 to develop path forward for binning report and proposed TPA revisions to include key provisions of the facility binning process.

Draft A of an EE/CA for non-time critical removal action of Bin C facilities is being prepared for transmittal to EPA and Ecology by the end of FY2006 for their review.

- **Miscellaneous Facility D&D**

Planning to D&D five structures (2707E, 2713E, 2715E, 2719E and 2722E) that do not have active utilities and have already undergone initial demolition preparation activities. This effort provided fill-in work and a skills-sharpening opportunity for workers that have recently demolished PFP's 232-Z Waste Incinerator Facility.

**Issue Resolution Meeting
Agreements and Issues List
July 19, 2006
200 Area Unit Managers' Meeting**

Agreements: The Tri-Parties agreed that data being collected by Vista to support the DNAPL investigation will be added to the 200-PW-1/200-PW-3/200-PW-6 feasibility study instead of the remedial investigation report. DOE/RL will clearly identify in the remedial investigation report those data sets that will be deferred from the remedial investigation report and presented in the feasibility study.

Agreement: The Tri-Parties agreed to the revised **Attachment 3** to the "Waste Control Plan for the 200-BP-5 Operable Unit," DOE/RL-2003-30, which reflects the addition of 3 new wells addressed in the new 200-BP-5 Drilling SAP. The new wells are highlighted in the update to Attachment 3.

Agreement: EPA has agreed to extend TPA Milestone M-15-48B to September 30, 2007 to bring it in line with the PW-1 FS schedule.

**200 Area Unit Managers' Meeting
OPEN ACTION ITEMS & TRACKING**

| Action # | Action/Subject | Assigned To | Owed To | Assigned Date | Original Due Date | Adjusted Due Date | Date Complete | Status |
|----------|---|-----------------|-----------|---------------|-------------------|-------------------|---------------|--|
| 69 | Evaluate status of NEPA documentation at NRDWL | DOE/FH - Brunke | Ecology | 5/18/06 | 6/15/06 | 7/19/06 | 7/19/06 | Closed-Ron Brunke emailed the SEPA checklist to Ecology on 7/19/06 |
| 70 | Update SW-1 waste article in Hanford Update by next UMM meeting | DOE - Roddy | Ecology | 6/15/06 | 7/13/06 | | 7/19/06 | Closed-Finalized on 7/6/06, sent to reproduction, to be distributed next week. |
| 71 | Set up a meeting with EPA to provide piece-meal data for BC Cribs | FH - Benecke | EPA | 6/15/06 | 6/23/06 | | 7/7/06 | Closed-Data provided to EPA on July 7, 2006. |
| 72 | Provide U-Canyon institutional Controls (IC) to sitewide revision. | FH- Ranade | EPA | 6/15/06 | 7/15/06 | | 7/7/06 | Closed-Letter to EPA, 7/7/06, TPA-CN-151. |
| 73 | Provide identity of party (ies) that are challenging Area C cultural review status. | DOE | EPA | 7/12/06 | 7/19/06 | | 7/19/06 | Closed-Challenge came from State Historic Preservation Officer. |
| 74 | Provide BC Cribs and Trenches schedule for Treatability Test | DOE-Foley | EPA-Lobos | 7/19/06 | 8/17/06 | | | |